

Appendix B

High Economic Growth Case Projections:

**World Energy Consumption
Gross Domestic Product
Carbon Dioxide Emissions
Nuclear Power Capacity**

Table B1. World Total Energy Consumption by Region, High Economic Growth Case, 1990-2020
 (Quadrillion Btu)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	100.1	112.7	115.7	131.9	145.4	158.2	171.2	1.9
United States ^a	84.2	94.6	97.0	109.1	119.1	128.7	138.2	1.7
Canada.	10.9	12.1	12.5	14.3	15.7	16.8	17.8	1.7
Mexico	5.0	6.1	6.1	8.5	10.6	12.7	15.2	4.4
Western Europe	59.8	65.8	66.0	73.8	78.2	82.5	88.0	1.4
United Kingdom	9.3	9.9	9.9	11.1	11.8	12.6	13.4	1.4
France	8.8	10.2	10.3	11.6	12.4	13.2	14.2	1.6
Germany	14.8	14.2	14.0	15.9	16.7	17.4	18.3	1.3
Italy.	7.0	8.0	8.0	9.2	9.9	10.6	11.2	1.6
Netherlands	3.4	3.8	3.8	4.2	4.4	4.7	4.9	1.2
Other Western Europe.	16.6	19.8	20.0	21.8	22.9	24.1	26.0	1.3
Industrialized Asia	22.8	27.6	27.9	31.0	32.9	35.0	37.1	1.4
Japan	17.9	21.5	21.7	24.0	25.3	26.7	28.2	1.2
Australasia	4.8	6.1	6.2	7.0	7.6	8.2	8.9	1.7
Total Industrialized	182.7	206.1	209.7	236.8	256.5	275.7	296.3	1.7
EE/FSU								
Former Soviet Union	60.7	38.7	39.2	46.2	52.5	61.3	69.7	2.8
Eastern Europe	15.6	11.9	11.2	12.9	14.8	17.6	20.1	2.8
Total EE/FSU	76.3	50.6	50.4	59.1	67.3	78.9	89.8	2.8
Developing Countries								
Developing Asia	51.0	72.9	70.9	103.9	135.0	172.7	215.4	5.4
China.	27.0	35.3	31.9	45.7	61.5	80.6	102.8	5.7
India	7.8	11.6	12.2	16.4	20.5	25.4	30.6	4.5
South Korea	3.7	6.9	7.3	9.8	11.3	13.5	15.7	3.7
Other Asia	12.6	19.1	19.5	32.0	41.8	53.2	66.3	6.0
Middle East	13.1	19.1	19.3	23.8	30.2	37.3	45.9	4.2
Turkey	2.0	3.0	3.0	3.7	4.6	5.5	6.7	4.0
Other Middle East	11.1	16.1	16.4	20.1	25.6	31.8	39.2	4.2
Africa	9.3	11.6	11.8	15.3	18.0	21.8	25.6	3.8
Central and South America . . .	13.7	19.4	19.8	26.5	34.5	44.7	55.0	5.0
Brazil.	5.7	8.2	8.5	10.3	12.9	15.8	19.0	3.9
Other Central/South America . .	8.1	11.2	11.2	16.2	21.6	28.9	36.0	5.7
Total Developing	87.2	123.0	121.8	169.4	217.6	276.4	341.9	5.0
Total World	346.2	379.7	381.9	465.2	541.4	631.0	728.0	3.1

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B1; and World Energy Projection System (2002).

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Table B2. World Total Energy Consumption by Region and Fuel, High Economic Growth Case, 1990-2020
 (Quadrillion Btu)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020	
	1990	1998	1999	2005	2010	2015	2020		
Industrialized Countries									
North America									
Oil	40.4	44.6	45.8	51.8	58.4	64.7	71.2	2.1	
Natural Gas	22.7	26.2	26.8	32.2	36.2	40.5	43.5	2.3	
Coal	20.5	23.5	23.5	26.2	28.1	29.5	32.1	1.5	
Nuclear.	7.0	8.0	8.6	9.3	9.1	8.8	8.8	0.1	
Other.	9.5	10.7	11.4	12.4	13.7	14.8	15.7	1.5	
Total	100.1	112.7	115.7	131.9	145.4	158.2	171.2	1.9	
Western Europe									
Oil	25.8	29.1	28.7	31.6	32.9	34.0	35.1	1.0	
Natural Gas	9.7	13.6	14.3	18.6	21.2	24.3	28.9	3.4	
Coal	12.4	8.8	8.4	7.9	7.8	7.6	7.0	-0.9	
Nuclear.	7.4	8.8	8.9	8.9	9.0	8.7	8.2	-0.4	
Other.	4.5	5.4	5.6	6.7	7.3	8.0	8.8	2.2	
Total	59.8	65.8	66.0	73.8	78.2	82.5	88.0	1.4	
Industrialized Asia									
Oil	12.5	13.7	13.9	15.5	16.4	17.1	17.8	1.2	
Natural Gas	2.5	3.6	3.8	4.3	4.5	5.1	5.9	2.1	
Coal	4.2	5.3	5.4	6.0	6.3	6.5	6.7	1.0	
Nuclear.	2.0	3.2	3.2	3.4	3.7	4.0	4.3	1.5	
Other.	1.6	1.7	1.7	1.8	1.9	2.2	2.4	1.6	
Total	22.8	27.6	27.9	31.0	32.9	35.0	37.1	1.4	
Total Industrialized									
Oil	78.7	87.4	88.4	98.9	107.7	115.8	124.1	1.6	
Natural Gas	35.0	43.5	44.8	55.1	61.9	69.8	78.3	2.7	
Coal	37.1	37.5	37.3	40.1	42.1	43.6	45.8	1.0	
Nuclear.	16.3	20.0	20.6	21.6	21.8	21.6	21.3	0.1	
Other.	15.6	17.9	18.6	21.0	23.0	24.9	26.9	1.8	
Total	182.7	206.1	209.7	236.8	256.5	275.7	296.3	1.7	
EE/FSU									
Oil	21.0	10.9	10.8	14.6	17.8	22.1	25.8	4.2	
Natural Gas	28.8	22.7	22.9	26.3	31.1	37.9	45.2	3.3	
Coal	20.8	11.4	11.1	11.6	11.4	11.1	10.5	-0.3	
Nuclear.	2.9	2.7	2.7	3.3	3.3	3.5	3.4	1.0	
Other.	2.8	3.0	3.0	3.3	3.7	4.3	5.0	2.5	
Total	76.3	50.6	50.4	59.1	67.3	78.9	89.8	2.8	
Developing Countries									
Developing Asia									
Oil	16.0	26.7	27.7	38.8	50.8	66.2	82.7	5.4	
Natural Gas	3.2	6.0	6.4	12.8	17.8	24.4	32.2	8.0	
Coal	27.7	34.5	30.7	42.4	53.5	65.6	80.1	4.7	
Nuclear.	0.9	1.5	1.6	2.5	3.4	4.2	5.6	6.1	
Other.	3.2	4.3	4.6	7.3	9.6	12.3	14.8	5.7	
Total	51.0	72.9	70.9	103.9	135.0	172.7	215.4	5.4	

See notes at end of table.

**Table B2. World Total Energy Consumption by Region and Fuel, High Economic Growth Case, 1990-2020
(Continued)**
(Quadrillion Btu)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020	
	1990	1998	1999	2005	2010	2015	2020		
Developing Countries (Continued)									
Middle East									
Oil	8.1	10.4	10.5	12.7	15.1	18.0	21.6	3.5	
Natural Gas	3.9	6.9	7.1	8.9	12.4	15.9	20.1	5.1	
Coal	0.8	1.2	1.1	1.3	1.6	1.8	2.0	2.7	
Nuclear.	0.0	0.0	0.0	0.0	0.1	0.1	0.2	—	
Other.	0.4	0.6	0.5	0.8	1.0	1.5	2.0	6.6	
Total	13.1	19.1	19.3	23.8	30.2	37.3	45.9	4.2	
Africa									
Oil	4.2	5.1	5.2	7.4	9.2	11.3	13.7	4.7	
Natural Gas	1.5	2.0	2.1	2.7	3.2	4.0	4.7	3.9	
Coal	3.0	3.7	3.6	4.2	4.5	5.0	5.5	2.0	
Nuclear.	0.1	0.1	0.1	0.1	0.1	0.2	0.2	2.0	
Other.	0.6	0.7	0.7	0.9	1.0	1.3	1.5	3.6	
Total	9.3	11.6	11.8	15.3	18.0	21.8	25.6	3.8	
Central and South America									
Oil	7.0	9.4	9.5	12.4	15.8	19.2	23.1	4.3	
Natural Gas	2.2	3.4	3.5	5.7	9.4	15.1	20.3	8.7	
Coal	0.6	0.9	0.9	1.1	1.3	1.4	1.6	2.8	
Nuclear.	0.1	0.1	0.1	0.2	0.2	0.2	0.3	4.9	
Other.	3.9	5.6	5.7	7.0	7.8	8.8	9.7	2.6	
Total	13.7	19.4	19.8	26.5	34.5	44.7	55.0	5.0	
Total Developing Countries									
Oil	35.2	51.5	52.9	71.4	90.9	114.7	141.2	4.8	
Natural Gas	10.8	18.3	19.2	30.1	42.8	59.5	77.4	6.9	
Coal	32.1	40.3	36.3	49.0	60.8	73.8	89.1	4.4	
Nuclear.	1.1	1.7	1.9	2.8	3.8	4.8	6.3	5.9	
Other.	8.0	11.1	11.5	16.1	19.4	23.8	28.0	4.3	
Total	87.2	123.0	121.8	169.4	217.6	276.4	341.9	5.0	
Total World									
Oil	134.9	149.8	152.2	184.9	216.3	252.6	291.0	3.1	
Natural Gas	74.5	84.5	86.9	111.5	135.9	167.2	200.8	4.1	
Coal	90.0	89.3	84.8	100.7	114.3	128.4	145.4	2.6	
Nuclear.	20.4	24.4	25.3	27.8	28.9	29.9	30.9	1.0	
Other.	26.5	32.0	33.1	40.3	46.1	53.0	59.8	2.9	
Total	346.2	379.7	381.9	465.2	541.4	631.0	728.0	3.1	

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B1; and World Energy Projection System (2002).

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Table B3. World Gross Domestic Product (GDP) by Region, High Economic Growth Case, 1990-2020
 (Billion 1997 Dollars)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	7,723	9,760	10,165	13,417	16,433	19,770	23,595	4.1
United States ^a	6,836	8,675	9,029	11,909	14,552	17,454	20,754	4.0
Canada.	555	665	699	900	1,077	1,246	1,411	3.4
Mexico	332	421	437	608	804	1,070	1,430	5.8
Western Europe	7,597	8,731	8,944	11,076	13,036	15,260	17,794	3.3
United Kingdom	1,146	1,353	1,384	1,750	2,077	2,493	2,944	3.7
France	1,299	1,455	1,499	1,870	2,217	2,560	2,938	3.3
Germany	1,879	2,156	2,187	2,674	3,118	3,623	4,203	3.2
Italy.	1,079	1,188	1,207	1,469	1,719	2,001	2,317	3.2
Netherlands	317	392	407	505	596	700	819	3.4
Other Western Europe.	1,877	2,187	2,260	2,809	3,310	3,882	4,573	3.4
Industrialized Asia	4,054	4,765	4,821	5,530	6,313	7,285	8,336	2.6
Japan	3,673	4,271	4,304	4,887	5,551	6,380	7,256	2.5
Australasia	381	494	516	643	762	905	1,080	3.6
Total Industrialized	19,374	23,256	23,930	30,023	35,783	42,315	49,726	3.5
EE/FSU								
Former Soviet Union	1,009	545	569	838	1,162	1,751	2,447	7.2
Eastern Europe	348	358	363	574	826	1,181	1,656	7.5
Total EE/FSU	1,357	903	932	1,411	1,988	2,932	4,104	7.3
Developing Countries								
Developing Asia	1,739	2,975	3,165	4,925	7,119	10,077	14,093	7.4
China.	427	968	1,037	1,730	2,654	3,911	5,693	8.4
India	268	445	473	727	1,027	1,444	2,018	7.2
South Korea	297	445	493	711	983	1,346	1,827	6.4
Other Asia	748	1,118	1,162	1,757	2,454	3,376	4,554	6.7
Middle East	379	580	577	806	1,084	1,476	2,023	6.2
Turkey	140	196	186	262	352	477	645	6.1
Other Middle East	239	384	391	544	731	999	1,377	6.2
Africa	405	485	499	708	935	1,211	1,554	5.6
Central and South America . . .	1,136	1,467	1,452	2,067	2,770	3,668	4,832	5.9
Brazil	674	810	816	1,166	1,575	2,089	2,761	6.0
Other Central/South America . .	462	657	636	900	1,195	1,578	2,071	5.8
Total Developing	3,660	5,507	5,693	8,505	11,907	16,431	22,501	6.8
Total World	24,392	29,665	30,555	39,940	49,678	61,679	76,330	4.5

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding.

Sources: DRI-WEFA, *World Economic Outlook*, Vol. 1 (Lexington, MA, 3rd Quarter 2001); Energy Information Administration (EIA), *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B20; and EIA, *World Energy Projection System* (2002).

Table B4. World Oil Consumption by Region, High Economic Growth Case, 1990-2020
 (Million Barrels per Day)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	20.4	22.7	23.4	26.5	29.8	33.0	36.3	2.1
United States ^a	17.0	18.9	19.5	21.6	24.1	26.4	28.5	1.8
Canada.	1.7	1.9	1.9	2.2	2.4	2.5	2.6	1.4
Mexico	1.7	1.9	2.0	2.7	3.3	4.1	5.1	4.7
Western Europe	12.5	14.1	13.9	15.3	15.9	16.5	17.0	1.0
United Kingdom	1.8	1.8	1.7	2.1	2.2	2.3	2.4	1.7
France	1.8	2.0	2.0	2.2	2.4	2.4	2.5	1.1
Germany.	2.7	2.9	2.8	3.2	3.3	3.4	3.4	0.9
Italy.	1.9	2.1	2.0	2.2	2.3	2.3	2.4	0.8
Netherlands	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0
Other Western Europe.	3.6	4.5	4.5	4.7	4.9	5.1	5.2	0.7
Industrialized Asia	6.2	6.8	6.9	7.6	8.1	8.5	8.8	1.2
Japan	5.1	5.5	5.6	6.1	6.5	6.6	6.8	0.9
Australasia	1.0	1.3	1.3	1.5	1.7	1.8	2.0	2.1
Total Industrialized	39.0	43.6	44.2	49.5	53.8	57.9	62.1	1.6
EE/FSU								
Former Soviet Union	8.4	3.8	3.7	5.3	6.5	8.3	9.7	4.7
Eastern Europe	1.6	1.4	1.5	1.7	2.0	2.3	2.6	2.8
Total EE/FSU	10.0	5.2	5.2	7.0	8.5	10.6	12.3	4.2
Developing Countries								
Developing Asia	7.6	12.8	13.3	18.6	24.4	31.8	39.7	5.4
China.	2.3	4.1	4.3	5.7	7.6	10.0	12.8	5.3
India	1.2	1.8	1.9	2.7	3.6	4.8	5.9	5.5
South Korea	1.0	2.0	2.0	2.5	2.9	3.3	3.7	2.8
Other Asia	3.1	4.9	5.0	7.8	10.3	13.6	17.3	6.1
Middle East	3.9	5.0	5.0	6.1	7.2	8.6	10.3	3.5
Turkey	0.5	0.6	0.6	0.9	1.0	1.3	1.5	4.4
Other Middle East	3.4	4.3	4.4	5.2	6.2	7.4	8.8	3.3
Africa	2.1	2.5	2.5	3.6	4.5	5.5	6.7	4.7
Central and South America . . .	3.4	4.6	4.7	6.1	7.7	9.4	11.3	4.3
Brazil	1.3	1.9	2.0	2.3	2.9	3.5	4.4	4.0
Other Central/South America . .	2.1	2.7	2.7	3.8	4.9	5.8	6.9	4.5
Total Developing	17.0	24.8	25.5	34.4	43.8	55.2	68.0	4.8
Total World	66.0	73.6	74.9	90.8	106.1	123.8	142.4	3.1

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B21; and World Energy Projection System (2002).

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Table B5. World Natural Gas Consumption by Region, High Economic Growth Case, 1990-2020
 (Trillion Cubic Feet)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	22.0	25.4	26.1	31.3	35.3	39.4	42.4	2.3
United States ^a	18.7	21.3	21.7	26.0	29.1	32.6	35.0	2.3
Canada.	2.4	2.9	3.1	3.5	3.8	4.2	4.6	1.9
Mexico	0.9	1.3	1.3	1.9	2.3	2.6	2.8	3.9
Western Europe	10.1	13.4	14.0	18.2	20.7	23.6	28.0	3.4
United Kingdom	2.1	3.1	3.3	3.9	4.5	5.1	6.0	3.0
France	1.0	1.3	1.3	1.9	2.2	2.6	3.2	4.2
Germany.	2.7	3.0	3.0	4.2	4.6	5.1	6.3	3.5
Italy.	1.7	2.2	2.4	3.0	3.4	3.9	4.3	2.8
Netherlands	1.5	1.8	1.7	2.0	2.2	2.3	2.5	1.8
Other Western Europe.	1.2	2.0	2.3	3.3	3.7	4.6	5.8	4.6
Industrialized Asia	2.6	3.5	3.6	4.1	4.3	4.9	5.6	2.2
Japan	1.9	2.5	2.6	3.0	3.0	3.4	4.0	2.0
Australasia	0.8	0.9	1.0	1.2	1.3	1.5	1.7	2.7
Total Industrialized	34.8	42.3	43.7	53.6	60.3	67.9	76.1	2.7
EE/FSU								
Former Soviet Union	25.0	19.9	20.1	22.7	26.2	31.2	36.7	2.9
Eastern Europe	3.1	2.5	2.4	3.1	4.4	6.1	7.8	5.7
Total EE/FSU	28.1	22.4	22.5	25.9	30.6	37.3	44.5	3.3
Developing Countries								
Developing Asia	3.0	5.6	6.0	12.0	16.7	22.7	29.9	7.9
China.	0.5	0.8	0.9	2.0	3.2	5.3	7.9	11.1
India	0.4	0.8	0.8	1.2	1.8	2.6	3.2	7.1
South Korea	0.1	0.5	0.6	1.2	1.5	2.1	2.7	7.5
Other Asia	1.9	3.6	3.8	7.6	10.2	12.8	16.1	7.1
Middle East	3.7	6.6	6.8	8.5	11.8	15.2	19.2	5.1
Turkey	0.1	0.4	0.4	0.5	0.7	1.0	1.4	5.6
Other Middle East	3.6	6.2	6.3	8.0	11.1	14.1	17.8	5.0
Africa	1.4	1.8	2.0	2.5	2.9	3.7	4.4	8.7
Central and South America . . .	2.0	3.1	3.2	5.2	8.7	13.9	18.6	8.7
Brazil	0.1	0.2	0.2	0.6	1.5	2.7	3.6	13.9
Other Central/South America . .	1.9	2.9	3.0	4.6	7.2	11.2	15.0	7.9
Total Developing	10.1	17.2	18.0	28.3	40.1	55.5	72.1	6.8
Total World	72.9	81.9	84.2	107.8	131.0	160.7	192.7	4.0

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B13; and World Energy Projection System (2002).

Table B6. World Coal Consumption by Region, High Economic Growth Case, 1990-2020
 (Million Short Tons)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	959	1,121	1,122	1,273	1,375	1,449	1,585	1.7
United States ^a	895	1,040	1,045	1,181	1,271	1,335	1,462	1.6
Canada.	55	66	63	69	77	83	88	1.5
Mexico	9	15	13	22	27	31	36	4.9
Western Europe	894	566	546	514	508	497	469	-0.7
United Kingdom	119	70	65	63	61	57	47	-1.5
France	35	29	26	23	17	18	15	-2.6
Germany	528	269	258	245	249	247	236	-0.4
Italy.	23	19	19	18	18	16	16	-0.9
Netherlands	15	16	14	13	9	9	7	-3.0
Other Western Europe.	173	164	165	152	153	149	147	-0.5
Industrialized Asia	231	287	295	323	337	350	359	0.9
Japan	125	144	149	171	181	191	195	1.3
Australasia	106	142	145	152	156	159	164	0.6
Total Industrialized	2,084	1,974	1,963	2,110	2,220	2,295	2,413	1.0
EE/FSU								
Former Soviet Union	848	396	414	442	435	425	403	-0.1
Eastern Europe	527	414	363	365	356	344	324	-0.5
Total EE/FSU	1,375	810	778	807	791	769	727	-0.3
Developing Countries								
Developing Asia	1,583	1,903	1,686	2,335	2,942	3,606	4,405	4.7
China.	1,124	1,300	1,075	1,516	2,005	2,541	3,156	5.3
India	242	333	348	446	505	563	659	3.1
South Korea	42	60	65	82	93	106	116	2.8
Other Asia	175	210	197	291	339	397	474	4.3
Middle East	66	99	96	109	137	153	167	2.7
Turkey	60	86	84	97	114	125	136	2.4
Other Middle East	6	12	12	12	23	27	31	4.5
Africa	152	181	177	204	218	245	268	2.0
Central and South America . . .	26	42	41	51	58	65	74	2.8
Brazil	17	28	27	32	40	45	53	3.2
Other Central/South America . .	9	15	14	19	18	20	21	2.1
Total Developing	1,827	2,226	2,000	2,699	3,355	4,069	4,914	4.4
Total World	5,287	5,009	4,740	5,615	6,366	7,134	8,054	2.6

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country. To convert short tons to metric tons, divide each number in the table by 1.102.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B16; and World Energy Projection System (2002).

Appendix B

Table B7. World Nuclear Energy Consumption by Region, High Economic Growth Case, 1990-2020
 (Billion Kilowatthours)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	649	750	808	865	847	820	818	0.1
United States ^a	577	674	728	759	737	707	702	-0.2
Canada.	69	68	70	96	100	103	106	2.0
Mexico	3	9	10	10	10	10	10	0.3
Western Europe	703	836	846	858	864	841	791	-0.3
United Kingdom	59	95	91	70	63	56	34	-4.6
France	298	369	375	408	424	437	463	1.0
Germany	145	154	161	160	154	147	112	-1.7
Italy.	0	0	0	0	0	0	0	—
Netherlands	3	4	4	4	0	0	0	-100.0
Other Western Europe.	198	215	215	216	222	202	182	-0.8
Industrialized Asia	192	316	309	333	363	394	421	1.5
Japan	192	316	309	333	363	394	421	1.5
Australasia	0	0	0	0	0	0	0	—
Total Industrialized	1,544	1,902	1,962	2,055	2,074	2,056	2,030	0.2
EE/FSU								
Former Soviet Union	201	183	190	217	222	233	208	0.4
Eastern Europe	54	61	60	82	78	86	99	2.4
Total EE/FSU	256	244	250	299	300	319	308	1.0
Developing Countries								
Developing Asia	88	145	160	248	331	417	548	12.2
China.	0	13	14	55	83	106	159	12.2
India	6	11	11	16	29	35	55	7.7
South Korea	50	85	98	128	137	177	218	3.9
Other Asia	32	36	37	49	82	99	116	5.6
Middle East	0	0	0	0	6	15	17	—
Turkey	0	0	0	0	0	0	0	—
Other Middle East	0	0	0	0	6	15	17	—
Africa	8	14	13	13	14	17	19	2.0
Central and South America . . .	9	10	11	18	19	18	29	4.9
Brazil	2	3	4	11	12	13	23	9.0
Other Central/South America . .	7	7	7	6	7	5	6	-0.8
Total Developing	105	169	184	279	371	467	613	5.9
Total World	1,905	2,315	2,396	2,634	2,745	2,841	2,950	1.0

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B8; and World Energy Projection System (2002).

**Table B8. World Consumption of Hydroelectricity and Other Renewable Energy by Region,
High Economic Growth Case, 1990-2020**
(Quadrillion Btu)

Region/Country	History			Projections				Average Annual Percent Change, 1999-2020
	1990	1998	1999	2005	2010	2015	2020	
Industrialized Countries								
North America	9.5	10.7	11.4	12.4	13.7	14.8	15.7	1.5
United States ^a	6.1	6.9	7.3	8.1	8.5	9.3	9.9	1.4
Canada.	3.1	3.5	3.6	3.8	4.3	4.6	4.8	1.4
Mexico	0.3	0.4	0.4	0.5	0.8	1.0	1.0	4.0
Western Europe	4.5	5.4	5.6	6.7	7.3	8.0	8.8	2.2
United Kingdom	0.1	0.1	0.1	0.3	0.4	0.4	0.5	6.0
France	0.6	0.7	0.8	0.2	0.3	0.4	0.4	-3.1
Germany	0.3	0.3	0.4	0.6	0.8	0.9	1.0	5.2
Italy.	0.4	0.5	0.6	1.2	1.2	1.4	1.5	4.6
Netherlands	0.0	0.0	0.0	0.3	0.4	0.4	0.4	10.7
Other Western Europe.	3.2	3.7	3.7	4.1	4.3	4.5	5.0	1.5
Industrialized Asia	1.6	1.7	1.7	1.8	1.9	2.2	2.4	1.6
Japan	1.1	1.2	1.2	1.3	1.3	1.5	1.6	1.6
Australasia	0.4	0.5	0.5	0.6	0.6	0.7	0.7	1.8
Total Industrialized	15.6	17.9	18.6	21.0	23.0	24.9	26.9	1.8
EE/FSU								
Former Soviet Union	2.4	2.3	2.3	2.6	2.8	3.1	3.4	1.8
Eastern Europe	0.4	0.6	0.6	0.7	0.9	1.2	1.6	4.5
Total EE/FSU	2.8	3.0	3.0	3.3	3.7	4.3	5.0	2.5
Developing Countries								
Developing Asia	3.2	4.3	4.6	7.3	9.6	12.3	14.8	5.7
China.	1.3	2.1	2.3	3.6	4.8	6.3	8.0	6.1
India	0.7	0.8	0.9	1.2	1.5	1.8	2.0	4.2
South Korea	0.0	0.0	0.0	0.1	0.1	0.2	0.3	8.9
Other Asia	1.1	1.3	1.4	2.4	3.2	4.0	4.5	5.8
Middle East	0.4	0.6	0.5	0.8	1.0	1.5	2.0	6.6
Turkey	0.2	0.4	0.4	0.4	0.5	0.6	0.7	3.3
Other Middle East	0.1	0.2	0.2	0.4	0.5	0.9	1.3	10.2
Africa	0.6	0.7	0.7	0.9	1.0	1.3	1.5	3.6
Central and South America . . .	3.9	5.6	5.7	7.0	7.8	8.8	9.7	2.6
Brazil	2.2	3.1	3.3	4.1	4.6	4.8	4.9	2.0
Other Central/South America . .	1.7	2.5	2.4	2.9	3.2	4.0	4.8	3.3
Total Developing	8.0	11.1	11.5	16.1	19.4	23.8	28.0	4.3
Total World	26.5	32.0	33.1	40.3	46.1	53.0	59.8	2.9

^aIncludes the 50 States and the District of Columbia. U.S. Territories are included in Australasia.

Notes: EE/FSU = Eastern Europe/Former Soviet Union. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country. U.S. totals include net electricity imports, methanol, and liquid hydrogen.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 1999*, DOE/EIA-0219(99) (Washington, DC, February 2001). **Projections:** EIA, *Annual Energy Outlook 2002*, DOE/EIA-0383(2002) (Washington, DC, December 2001), Table B1; and World Energy Projection System (2002).